

ABSTRACT OF THE DISCLOSURE

A photodiode comprises an optical detection portion for detecting an optical signal and outputting a photoelectric conversion signal. The optical detection portion has a semiconductor substrate of a first conductive type and semiconductor layers of a second conductive type formed in spaced-apart relation in a surface of the semiconductor substrate. A depletion layer is formed in the semiconductor substrate by application of a reverse bias to the photodiode so as to surround the semiconductor layers. An etched surface portion of the depletion layer is disposed between the semiconductor layers so that an interface level region of the surface of the semiconductor substrate does not exist between the semiconductor layers.